IFO2225-851 Series

22” TFT Fanless Touch Panel Computer with Intel® Core™ 2 Duo Processor

User’s Manual

Disclaimers

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Safety Approvals

- CE Marking
- FCC Class A

FCC Compliance

This equipment has been tested in compliance with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are meant to provide reasonable protection against harmful interference in a residential installation. If not installed and used in accordance with proper instructions, this equipment might generate or radiate radio frequency energy and cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following methods:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment to another outlet of a circuit that doesn't connect with the receiver.
4. Consult the dealer or an experienced radio/TV technician for help.

Shielded interface cables must be used in order to comply with the emission limits.

Safety Precautions

Before getting started, read the following important safety precautions.

1. The **IFO2225-851 Series** does not come equipped with an operating system. An operating system must be loaded first before installing any software into the computer.
2. Be sure to ground yourself to prevent static charge when installing the internal components. Use a grounding wrist strap and place all electronic components in any static-shielded devices. Most electronic components are sensitive to static electrical charge.
3. Disconnect the power cord from the **IFO2225-851 Series** before any installation. Be sure both the system and external devices are turned OFF. A sudden surge of power could ruin sensitive components that the **IFO2225-851 Series** must be properly grounded.
4. Make sure it is the correct voltage of the power source before connecting the equipment to the power outlet.
5. The brightness of the flat panel display will be getting weaker as a result of frequent usage. However, the operating period varies depending on the application environment.
6. Turn OFF the system power before cleaning. Clean the system using a cloth only. Do not spray any liquid cleaner directly onto the screen. The **IFO2225-851 Series** may come with or w/o a touchscreen. Although the touchscreen is chemical resistant, it is recommended that you spray the liquid cleaner on a cloth first before wiping the screen. In case your system comes without the touchscreen, you must follow the same procedure and not spray any cleaner on the flat panel directly.
7. Avoid using sharp objects to operate the touchscreen. Scratches on the touchscreen may cause malfunction or internal failure to the touchscreen.
8. The flat panel display is not susceptible to shock or vibration. When assembling the **IFO2225-851 Series**, make sure it is securely installed.
9. Do not leave this equipment in an uncontrolled environment where the storage temperature is below -20℃ or above 60℃. It may damage the equipment.
10. External equipment intended for connection to signal

input/out or other connectors shall comply with relevant UL/IEC standard.

11. Do not open the system's back cover. If opening the cover for maintenance is a must, only a trained technician is allowed to do so. Integrated circuits on computer boards are sensitive to static electricity. To avoid damaging chips from electrostatic discharge, observe the following precautions:
    - Before handling a board or integrated circuit, touch an unpainted portion of the system unit chassis for a few seconds. This will help to discharge any static electricity on your body.
    - When handling boards and components, wear a wrist-grounding strap, available from most electronic component stores.

Classification

1. Degree of production against electric shock: not classified
2. Degree of protection against the ingress of water: IPX1
3. Equipment not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.
4. Mode of operation: Continuous
5. Type of protection against electric shock: Class I equipment

General Cleaning Tips

You may need the following precautions before you begin to clean the computer. When you clean any single part or component for the computer, please read and understand the details below fully.

1. When you need to clean the device, please rub it with a piece of dry cloth.
2. Be cautious of the tiny removable components when you use a vacuum cleaner to absorb the dirt on the floor.
3. Turn the system off before you start to clean up the component or computer.
4. Never drop the components inside the computer or get circuit board damp or wet.
5. Be cautious of all kinds of cleaning solvents or chemicals when you use it for the sake of cleaning. Some individuals may be allergic to the ingredients.
6. Try not to put any food, drink or cigarette around the computer.

Cleaning Tools:

Although many companies have created products to help improve the process of cleaning your computer and peripherals users can also use household items to clean their computers and peripherals. Below is a listing of items you may need or want to use while cleaning your computer or computer peripherals.

Keep in mind that some components in your computer may only be able to be cleaned using a product designed for cleaning that component, if this is the case it will be mentioned in the cleaning.

- Cloth: A piece of cloth is the best tool to use when rubbing up a component. Although paper towels or tissues can be used on most hardware as well, we still recommend you to rub it with a piece of cloth.
- Water or rubbing alcohol: You may moisten a piece of cloth a bit with some water or rubbing alcohol and rub it on the computer. Unknown solvents may be harmful to the plastics parts.
- Vacuum cleaner: Absorb the dust, dirt, hair, cigarette particles, and other particles out of a computer can be one of the best methods of cleaning a computer. Over time these items can restrict the airflow in a computer and cause circuitry to corrode.

- Cotton swabs: Cotton swaps moistened with rubbing alcohol or water are excellent tools for wiping hard to reach areas in your keyboard, mouse, and other locations.
- Foam swabs: Whenever possible it is better to use lint free swabs such as foam swabs.

Note *We strongly recommended that you should shut down the system before you start to clean any single components.*

Please follow the steps below:

1. Close all application programs
2. Close operating software
3. Turn off power switch
4. Remove all device
5. Pull out power cable

Scrap Computer Recycling

If the computer equipments need the maintenance or are beyond repair, we strongly recommended that you should inform your Axiomtek distributor as soon as possible for the suitable solution. For the computers that are no longer useful or no longer work well, please contact your Axiomtek distributor for recycling and we will make the proper arrangement.

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CHAPTER 1
INTRODUCTION

This chapter contains general information and detailed specifications of the **IFO2225-851 Series**. Chapter 1 includes the following sections:

- **General Description**
- **Features**
- **System Specification**
- **Dimensions**
- **I/O Outlets**
- **Package List**

1.1 General Description

The IFO2225-851 is an ultra slim panel computer equipped with 22-inch 300nits high brightness WSXGA+ LCD display and supports superior Intel® Core™ 2 Duo processor up to 2.53 GHz with FSB 667/800/1067MHz and up to 8G of dual-channel DDR3 system memory. Powered by Intel® the mobile Intel GM45 express chipset with integrated mobile Intel GMA4500MHD, it offers excellent 3D graphics and dual-view capability. The panel computer is certified with certifications to meet grade approval standards. The fanless design and waterproof enclosure allow it to operate reliably and quietly, it applied in any environments.

The panel also supports Dual View and multiple I/O options. Furthermore, the IFO2225-851 supports a PCI or PCIe interface for flexibility and an internal antenna for wireless expansion. With a built-in 1.3 mega pixels camera and speakers, this durable panel computer is also the best solutions for VoIP and remote monitoring.

1.2 Features

- 22" (300nits) WSXGA+ TFT LCD
- Fanless socket P Intel® Core™ 2 Duo or Intel® Celeron M processor
- Spill and dust resistant design (front panel: IP65, whole enclosure: IPX1)
- Optional 1 PCI or PCIe x 4 expansion slot
- Built-in 1.3 mega pixels camera
- Optional wireless (802.11 b/g) antenna/ RFID reader/ Bluetooth

1.3 System Specifications

FRONT BEZEL	PLASTIC ABS	
LCD PANEL	DISPLAY TYPE	22" WSXGA TFT
	BRIGHTNESS (cd/m^2)	300 nits
	RESOLUTION	1680 x 1050
	VIEWING ANGLE (H/V)	$178^o/178^o$

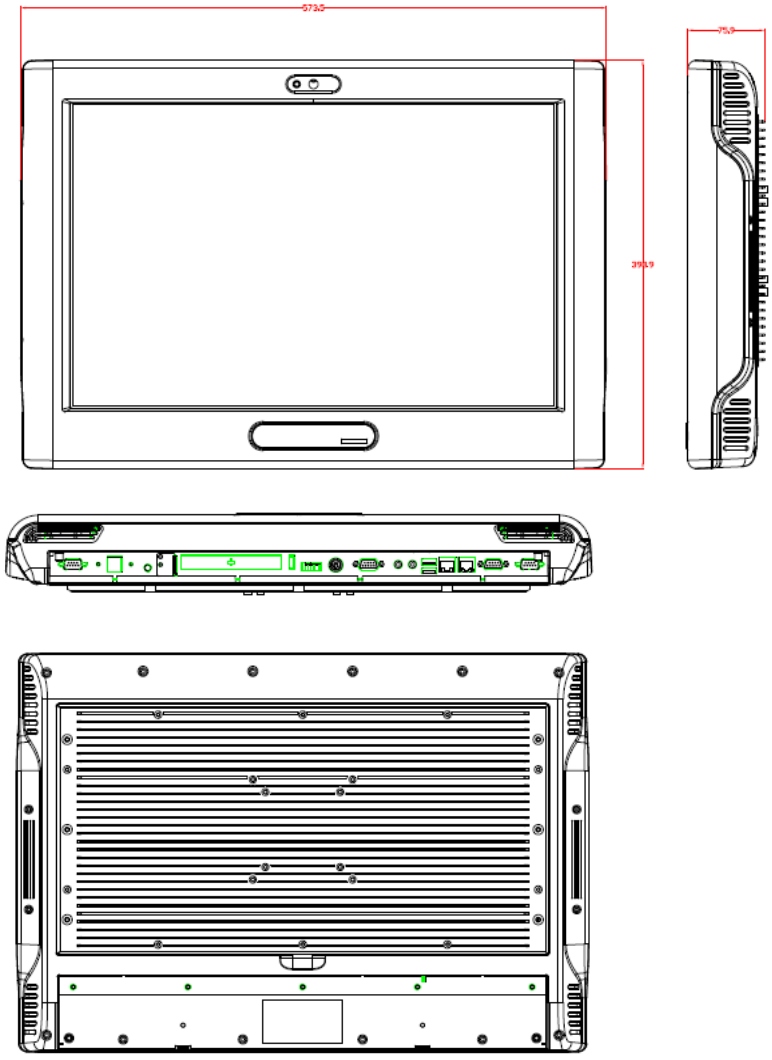
MAIN SYSTEM	CPU	Intel® Core™ 2 Duo processor up to 2.53 GHz with FSB 667/800/1067MHz
	CHIPSET	INTEL® GM/GL45+ICH9M
	SYSTEM MEMORY	SUPPORTS 2 DDR3 SODIMM MEMORY UP TO 8 GB
	STORAGE	1 x 2.5" SATA HDD DRIVE BAY 1 x CompactFlash™
	OPTICAL DRIVE	OPTIONAL 1 COMPACT CD-ROM OR COMBO DRIVE
I/O CONNECTORS	1 x RS-232/RS-422/RS-485 (COM 1)	
	2 x RS-232 (COM 2/3)	
	4 x USB 2.0	
	1 x AUDIO (MIC-IN/LINE-OUT)	
	1 x VGA	
	2 x 10/100/1000 Mbps ETHERNET	
	1 x 12V DC-IN POWER CONNECTOR	
CAMERA	1 x 1.3 MEGA PIXELS CAMERA (optional)	
TOUCHSCREEN	RESISTIVE TYPE	
	LIGHT TRANSMISSION: 80%	
	TOUCH LIFETIME: 35 MILLION TOUCHES	
POWER SUPPLY	12VDC, w/ AC-DC POWER ADAPTOR	
DIMENSIONS	573.5mm (22.57") (W) x 75.9mm (2.98") (D) x 398.9mm (15.7") (H)	
WEIGHT	10.58 kg (23.32 lb)	

ENVIRONMENTAL	OPERATION TEMPERATURE: 0ºC~40ºC (32ºF~104ºF)
	RELATIVE HUMIDITY: 10%~95%, NON-CONDESING
	SHOCK: 10G PEAK ACCELERATION (11 SEC. DURATION)
CERTIFICATION	CE, FCC classB, EN6060101, UL60601-1

NOTE *All specifications and images are subject to change without notice.*

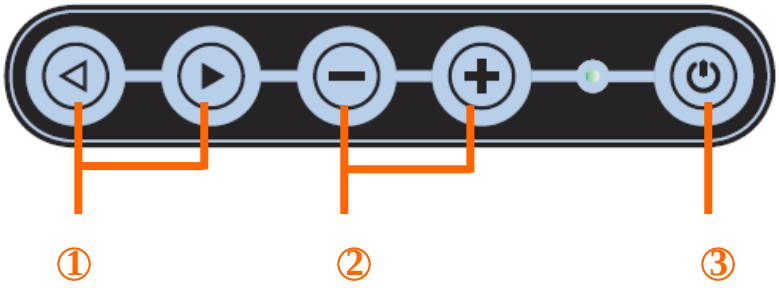
1.4 Dimensions

The following diagrams show you dimensions and outlines of the **IFO2225-851 Series**.

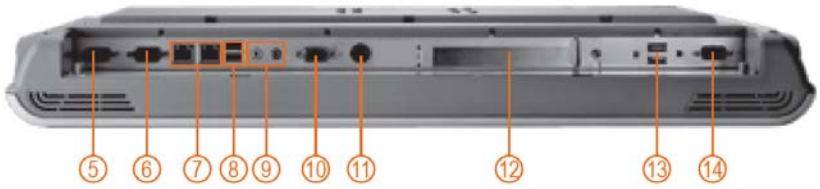


1.5 I/O Outlets

The following figures show you the locations of the **IFO2225-851 Series** I/O outlets.



- **I/O Outlets**



NO	CONNECTOR
1	BRIGHTNESS ADJUST BUTTONS
2	VOLUME ADJUST BUTTONS
3	POWER LED
4	MIC
5	COM 2 (RS-232)
6	COM 1 (RS-232/422/485)
7	ETHERNET X 2
8	USB 2.0 X 2
9	Audio (Line-out / Mic-in)
10	VGA
11	Power connector
12	PCI or PCIe slot
13	USB 2.0 X 2
14	COM 3 (RS-232)

1.6 Packing List

The package bundled with your **IFO2225-851 Series** should contain the following items:

- IFO2225-851 Series Unit x 1
- AC-DC Power Adaptor
- Power Cord x 1
- CD x 1 (For Driver and User's Manual)
- DVD-combo Cover x 2 (For within DVD-combo) (option)
- Wall-Mount Bracket x 1

If you can not find this package or any items are missing, please contact AXIOMTEK distributors immediately.

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CHAPTER 2
HARDWARE INSTALLATION

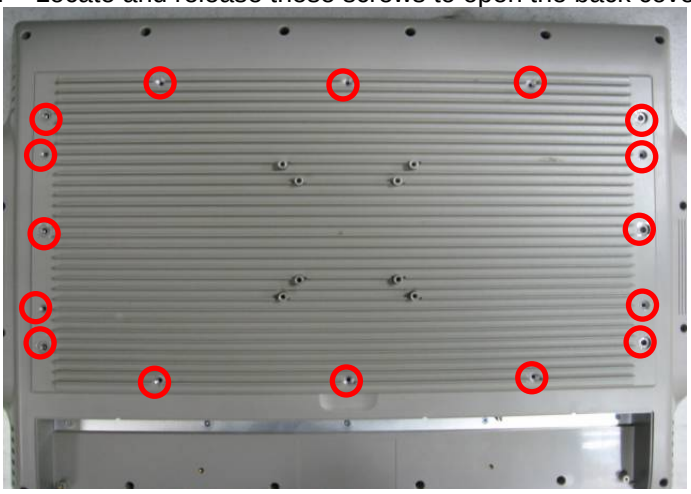
The **IFO2225-851 Series** are convenient for your various hardware configurations, such as CPU (Central Processing Unit) and HDD (Hard Disk Drive). The chapter 2 will show you how to install the hardware. It includes:

2.1 DRAM Installation

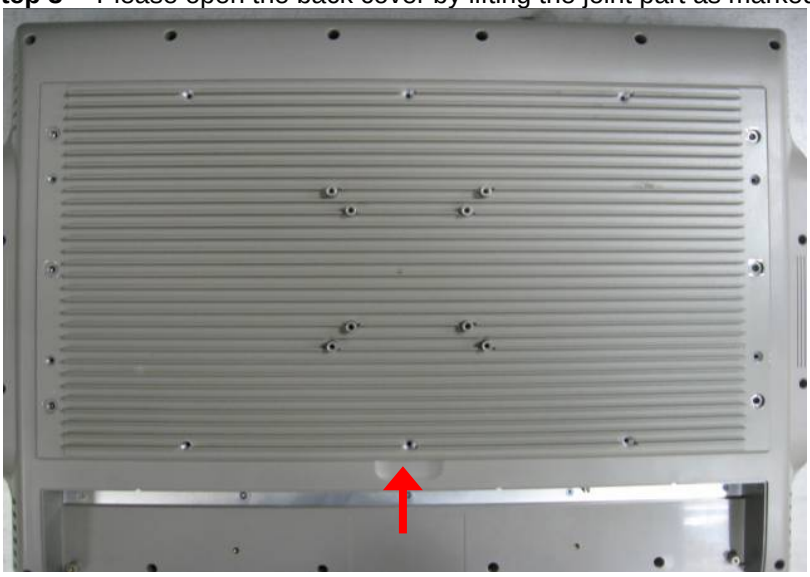
The IFO2225-851 provides socket P and two 204-pin DDR3 SO-DIMM sockets that support system memory up to 8GB. Please follow steps below to install the memory modules:

Step 1 Turn off the system, and unplug the Power cord.

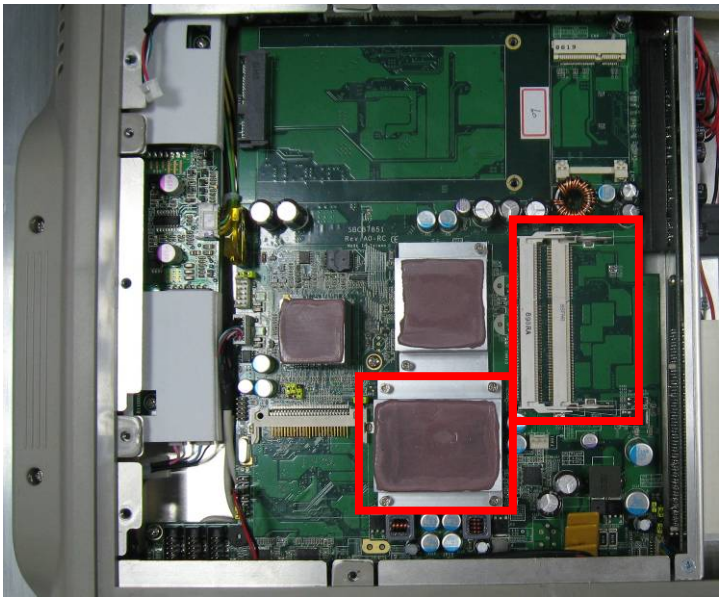
Step 2 Locate and release these screws to open the back cover.



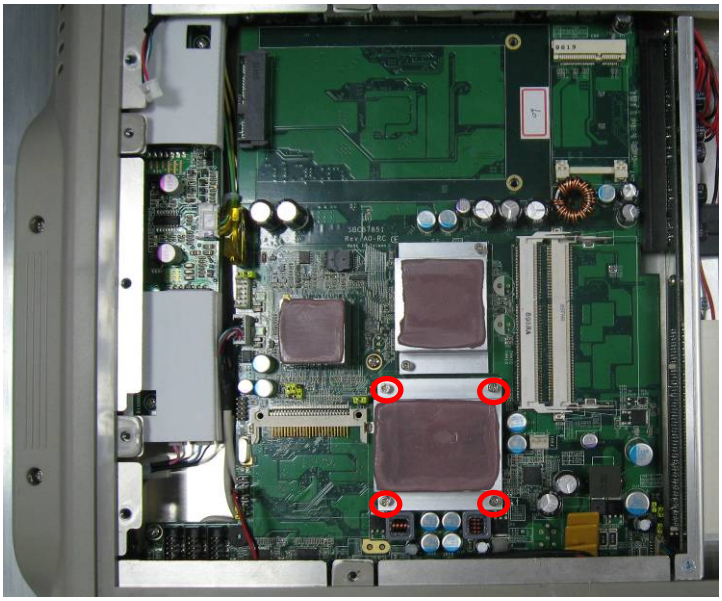
Step 3 Please open the back cover by lifting the joint part as marked.



Step 4-1 Open the back cover and find main board and locate the SO-DIMM socket and CPU cooler.

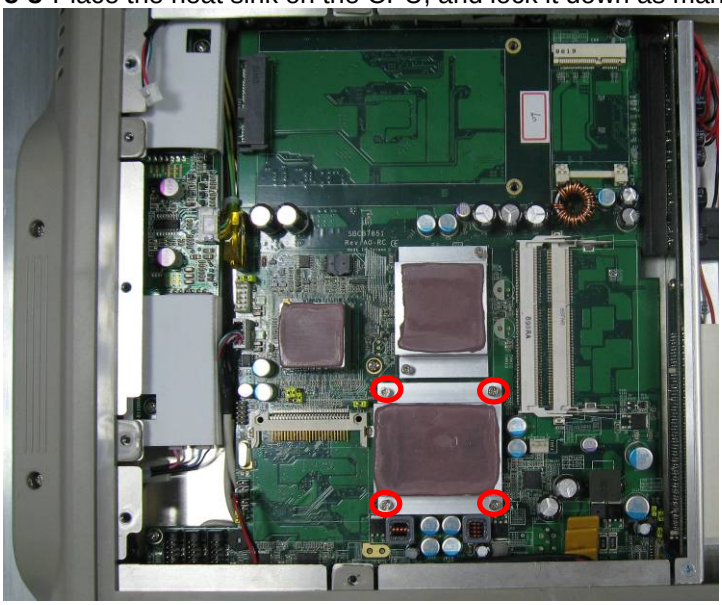


Step 5-1 Release these screws as marked.

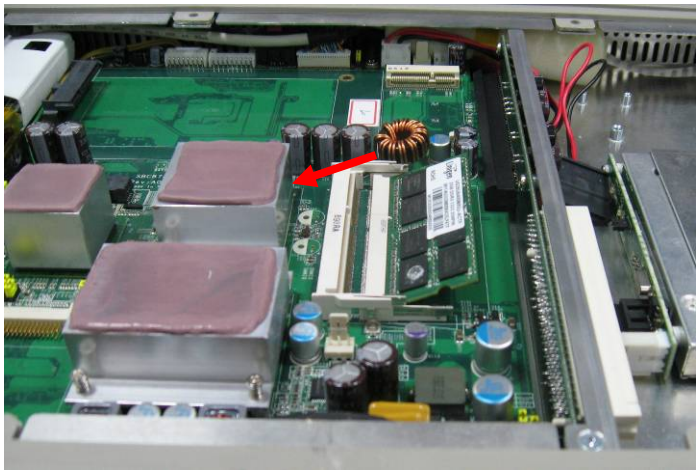


Step 5-2 Align pins of the CPU with pin holes of the socket. Be careful of the CPU's orientation that you need to align the arrow mark on the CPU with the arrow key on the socket. Place the CPU into the socket, and use a screwdriver to lock it onto the socket as marked.

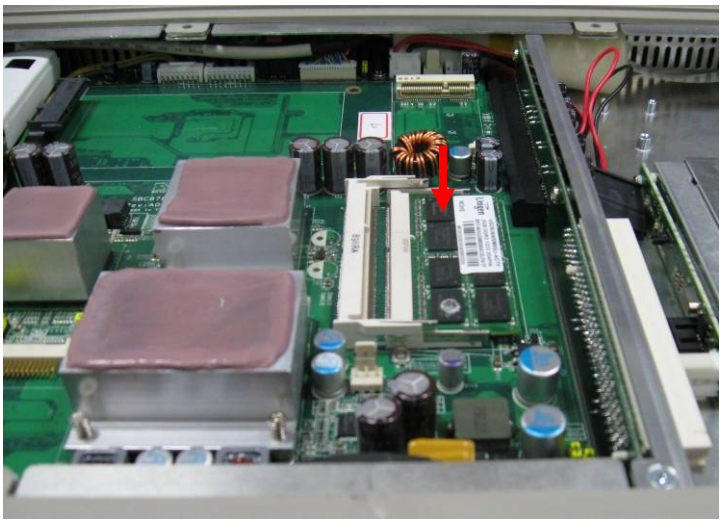
Step 5-3 Place the heat sink on the CPU, and lock it down as marked.



Step 6-1 Push down latches on each side of the SO-DIMM socket.



Step 6 Install the memory module into the socket and push it firmly down until it is fully seated. The socket latches are levered upwards and clipped on to the edges of the SO-DIMM.

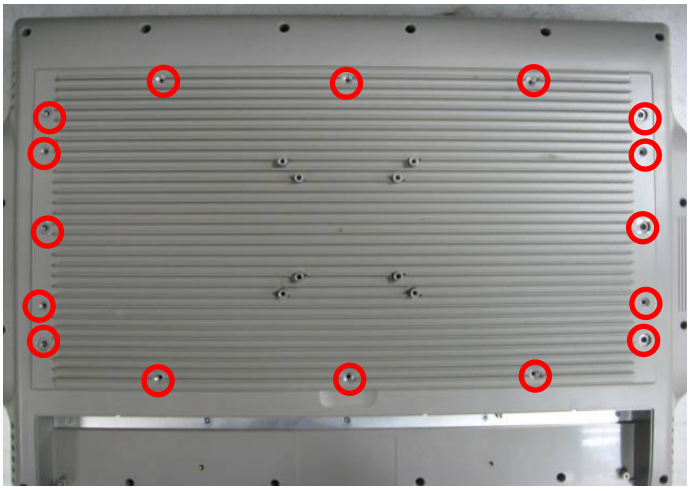


2.2 Hard Disk Drive Installation

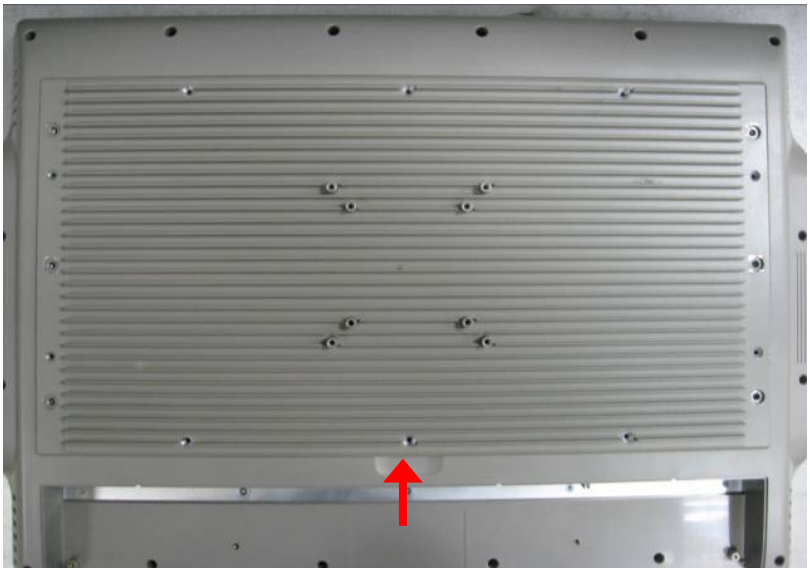
The **IFO2225-851 Series** offers a convenient drive bay module for users to install HDD. The system offers users one 2.5" Hard Disk Drive for installation. Please follow the steps:

Step 1 Turn off the system, and unplug the Power cord.

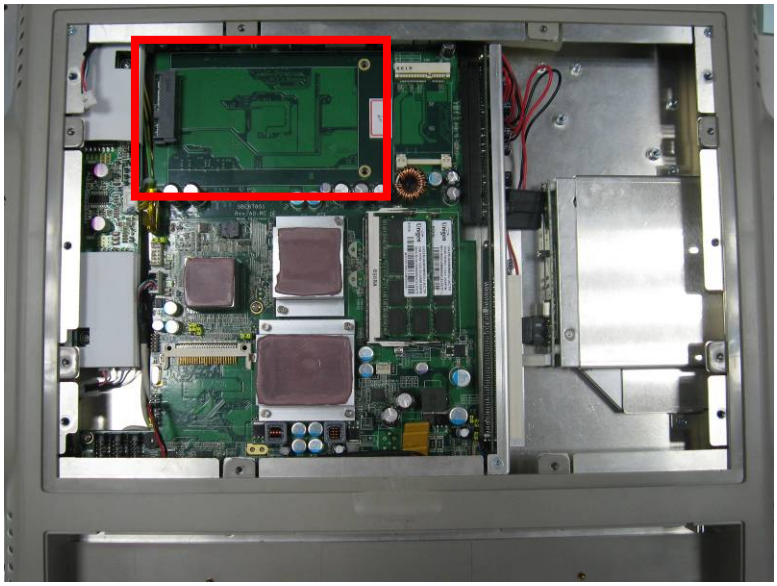
Step 2 Locate and release these screws to open the back cover.



Step 3 Please open the back cover by lifting the joint part as marked.

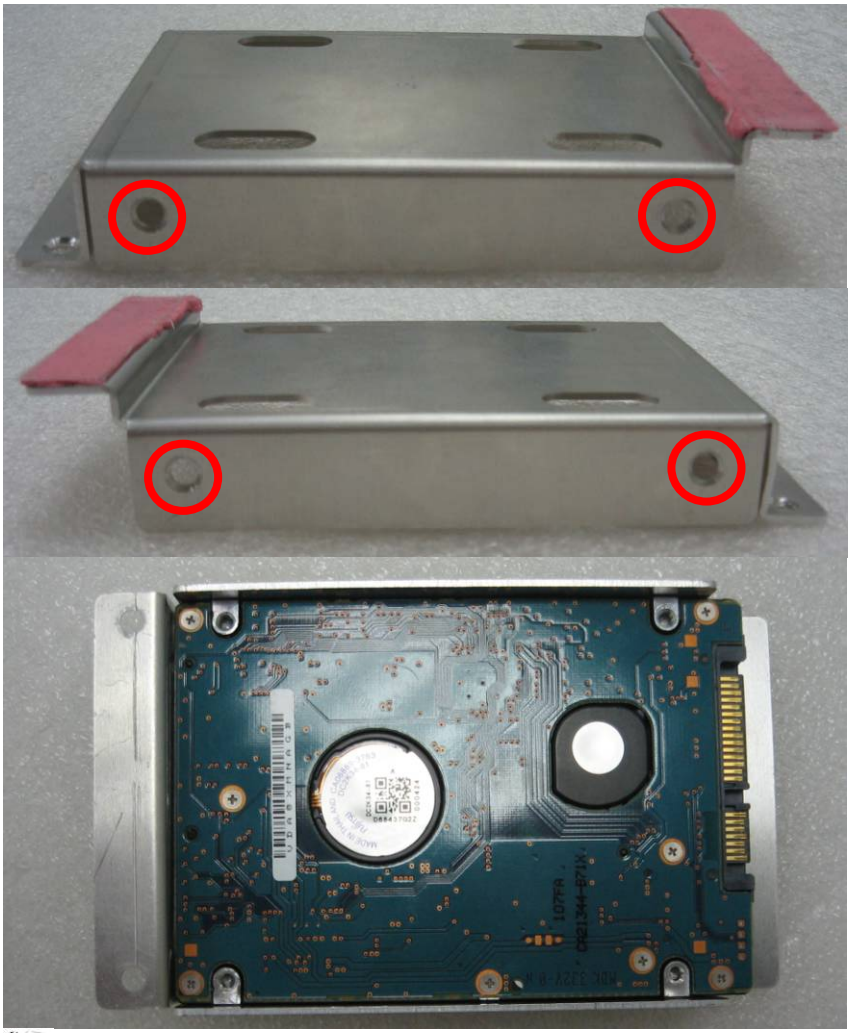


Step 4 Find the HDD bracket on accessory package and fine HDD socket on main board as marked.



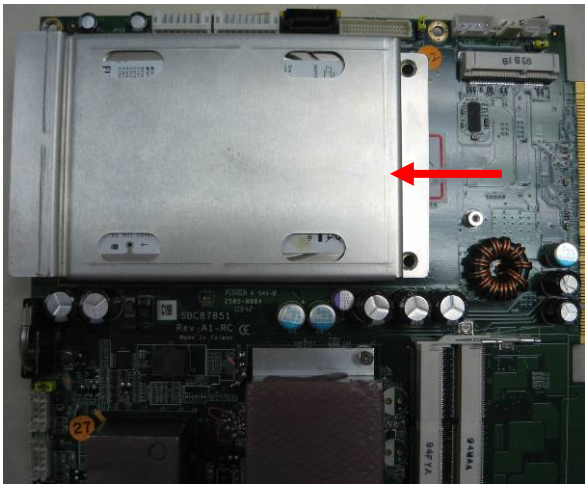
Step 5 Use assembly parts to fix HDD with the bracket.

1. HDD Bracket x1
2. 2.5 inch Hard-disk
3. Screw x 4
4. Fix four screw holes on the bracket, and assembly the HDD with the bracket.



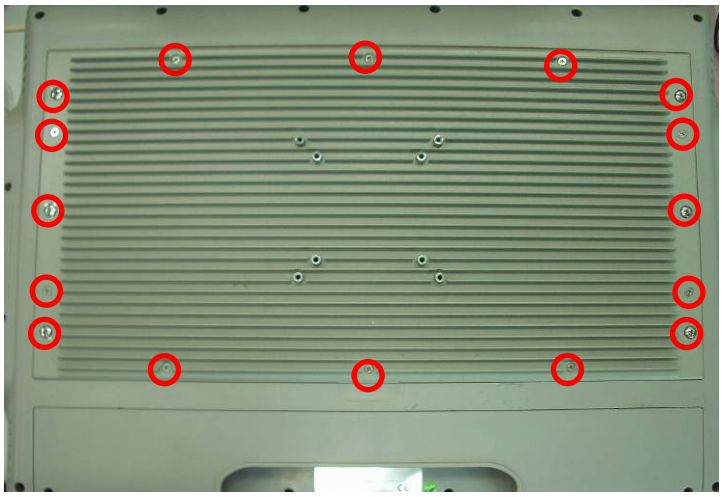
ATTENTION *Please follow the direction of Hard-disk installation. "Hard-disk PCB faceup".*

Step 6 Install the HDD bracket inside the system. Plug the HDD in the SATA connector on main board.



Step 7 Fix two screw holes on main board as marked.

Step 8 Close the back cover to the chassis, and fasten all screws.

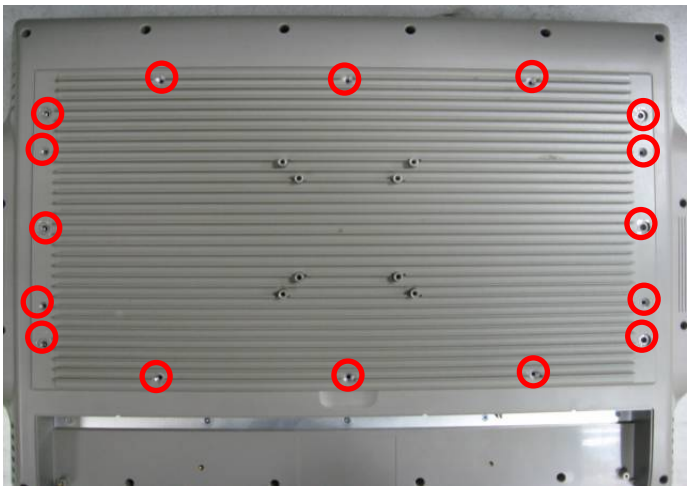


2.3 CF Card Installation

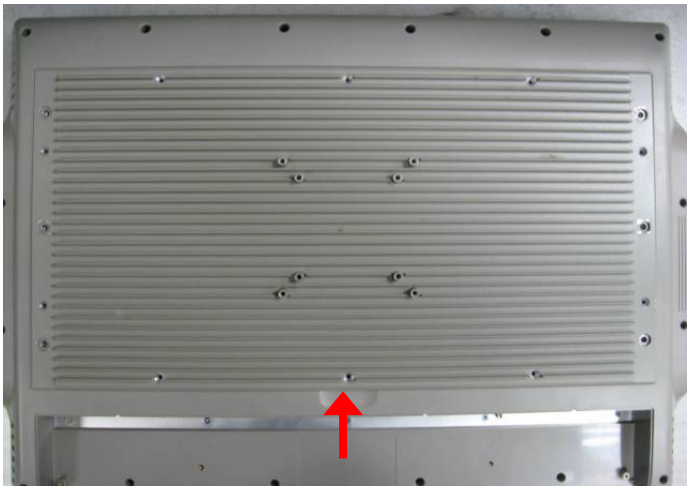
The **IFO2225-851 series** provides one CF slot for users to install CompactFlash™ card. Please refer to the following instructions for installation:

Step 1 Turn off the system, and unplug the Power cord.

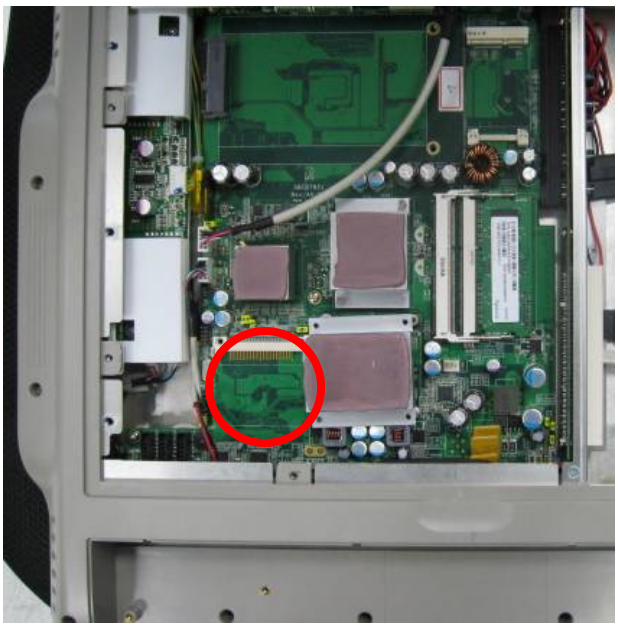
Step 2 Locate and release these screws to open the back cover.

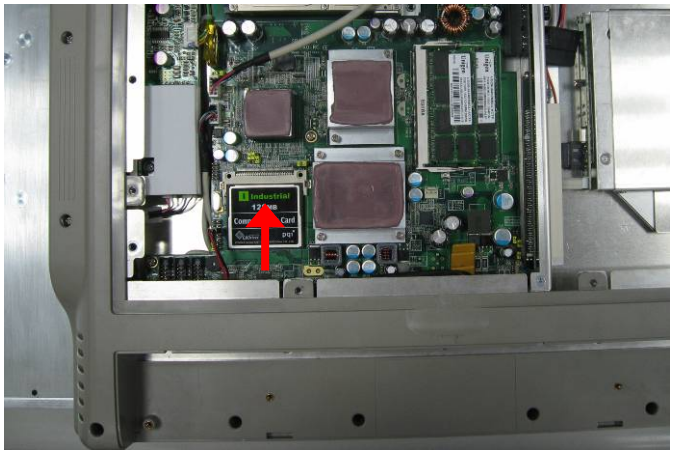


Step 3 Please open the back cover by lifting the joint part as marked.

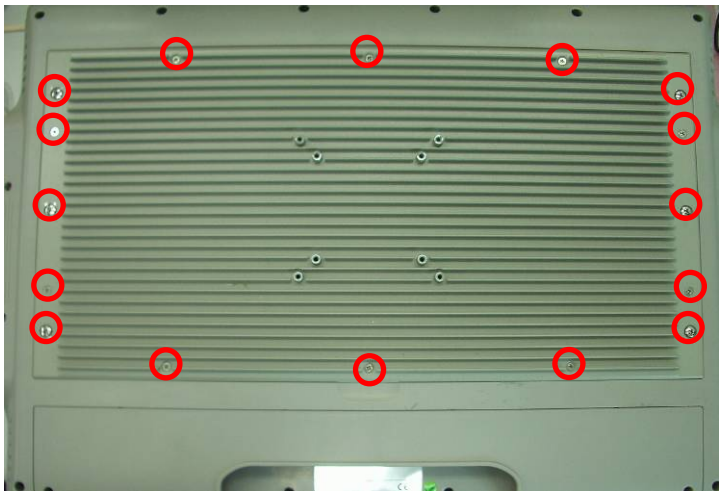


Step 4 Locate the CompactFlash™ socket, and insert the card into the socket.





Step 5 Close the back cover to the chassis, and fasten all screws.

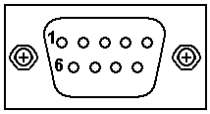


2.4 Serial Ports Interface

The **IFO2225-851 series** has three serial ports, COM1 (RS-232/ 422/ 485) and COM2 / COM3 (RS-232).

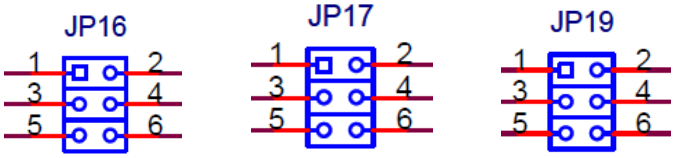
The following table shows you the pin assignments of this connector:

Pin	Signal	Pin	Signal
1	Data Carrier Detect (DCD)	6	Data Set Ready (DSR)
2	Receive Data (RXD)	7	Request To Send (RTS)
3	Transmit Data (TXD)	8	Clear To Send (CTS)
4	Data Terminal Ready (DTR)	9	Ring Indicator (RI)
5	Ground (GND)		



In addition, COM1 can be set for RS-232/422/485 by jumper. The jump setting is listed as below:

COM1	JP16	JP17	JP19
RS-232 (default)	1-2	3-5,4-6	3-5,4-6
RS-422	3-4	1-3,2-4	1-3,2-4
RS-485	5-6	1-3,2-4	1-3,2-4



When COM1 is set to RS-422 or RS-485, the pin assignments are listed below:

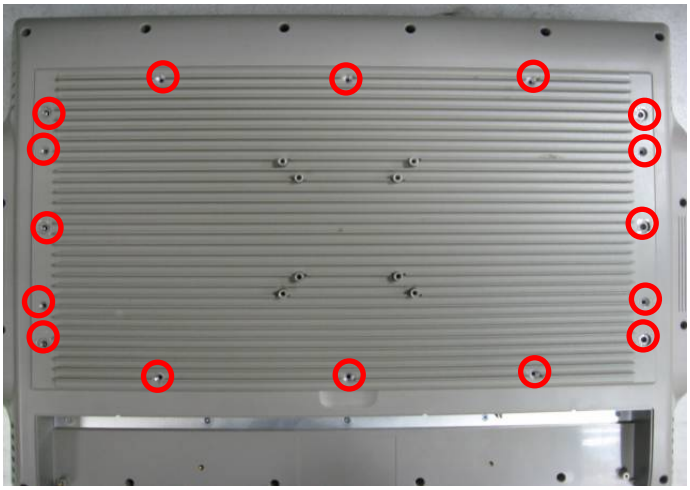
Pin #	Signal Name	
	RS-422	**RS-485**
1	TX-	DATA-
2	TX+	DATA+
3	RX+	No connector
4	RX-	No connector
5	No connector	No connector
6	No connector	No connector
7	No connector	No connector
8	No connector	No connector
9	GND	GND

2.5 Wireless Module Installation (Optional)

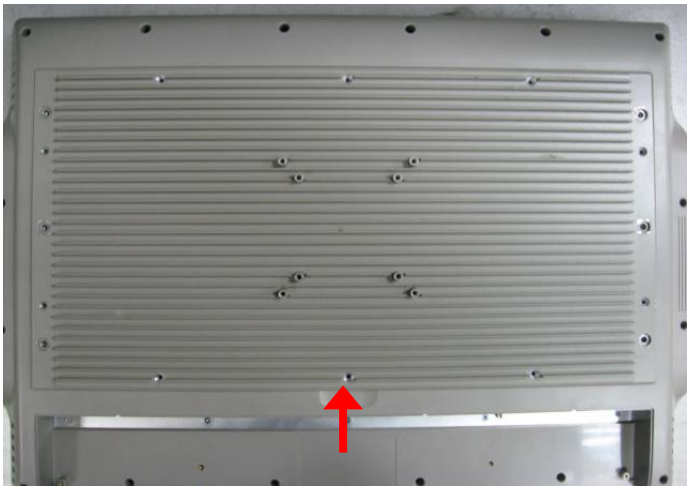
You can follow the steps below to install an optional wireless module.

Step 1 Turn off the system, and unplug the Power cord.

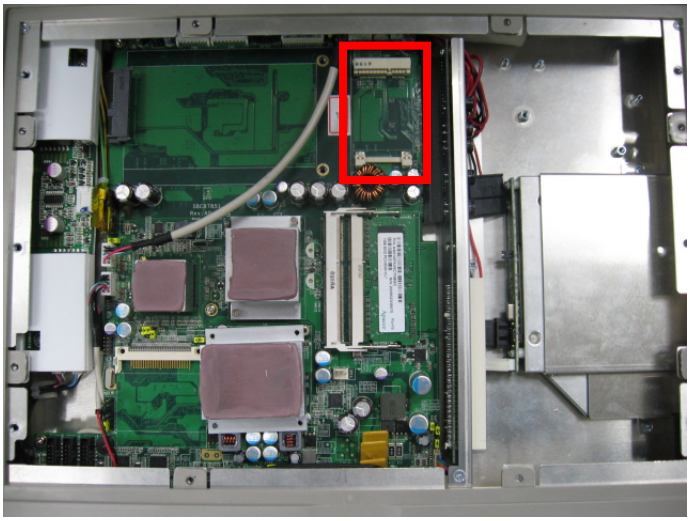
Step 2 Locate and release these screws to open the back cover.



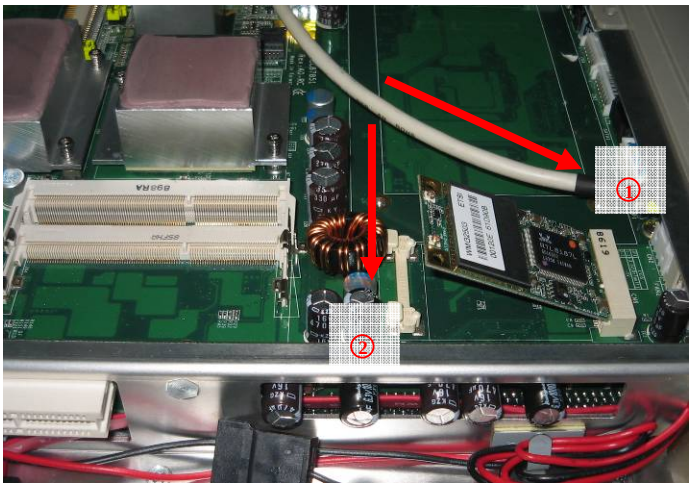
Step 3 Please open the back cover by lifting the joint part as marked.



Step 4 Open the back cover and find main board.

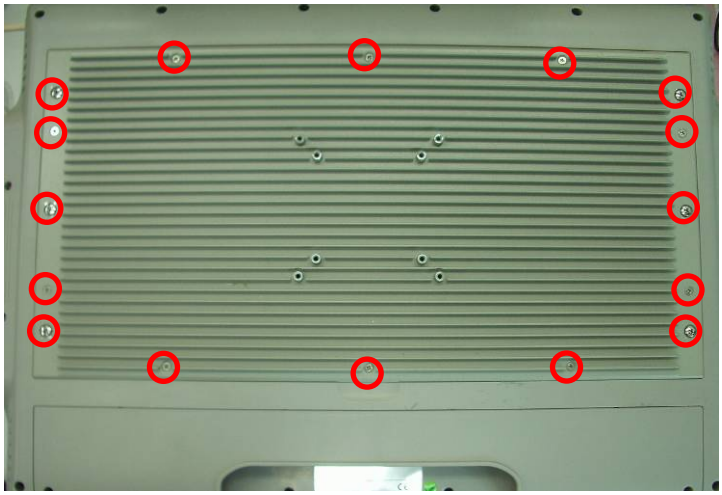


Step 5 The socket latches are clipped on to the edges of the Mini card. Install wireless LAN card to the socket.



Step 6 Find the built-in Antenna cable which is tied with other cables on the bottom of the device. There are two connectors on wireless LAN card. One is MAIN, and the other is AUX. Connect antenna cable to **MAIN** connector on wireless LAN card.

Step 7 Close the back cover to the chassis, and fasten all screws.

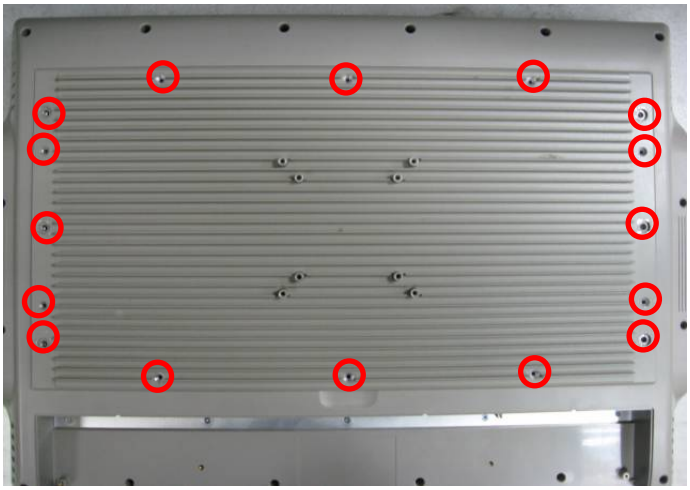


2.6 Add-on card Installation (Optional)

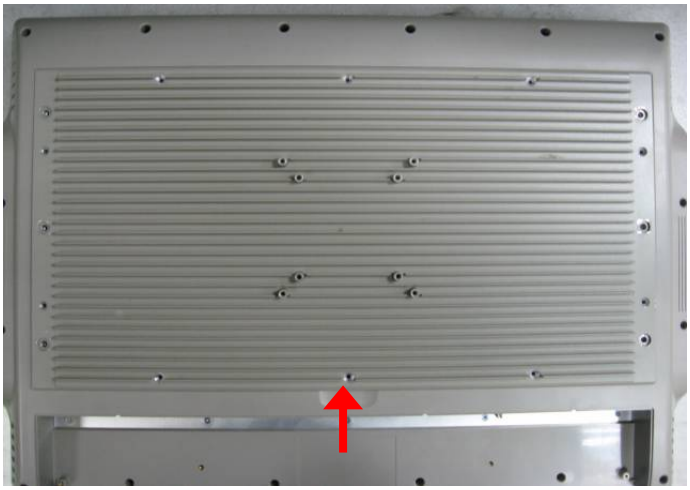
You can follow the steps below to install an optional add-on card.

Step 1 Turn off the system, and unplug the Power cord.

Step 2 Locate and release these screws to open the back cover.

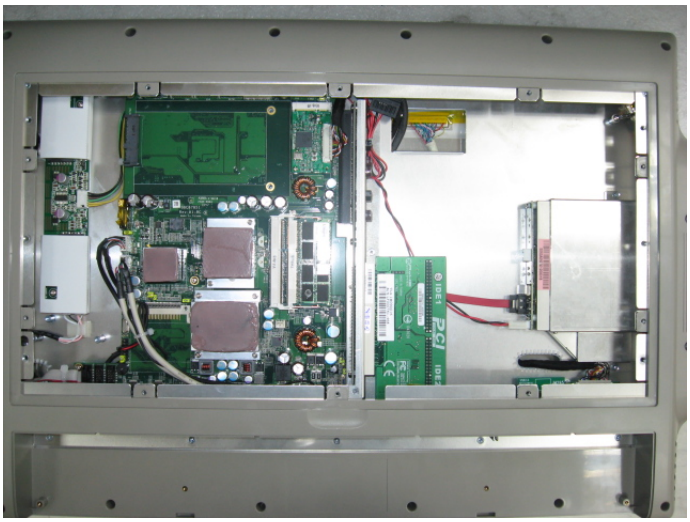


Step 3 Please open the back cover by lifting the joint part as marked.

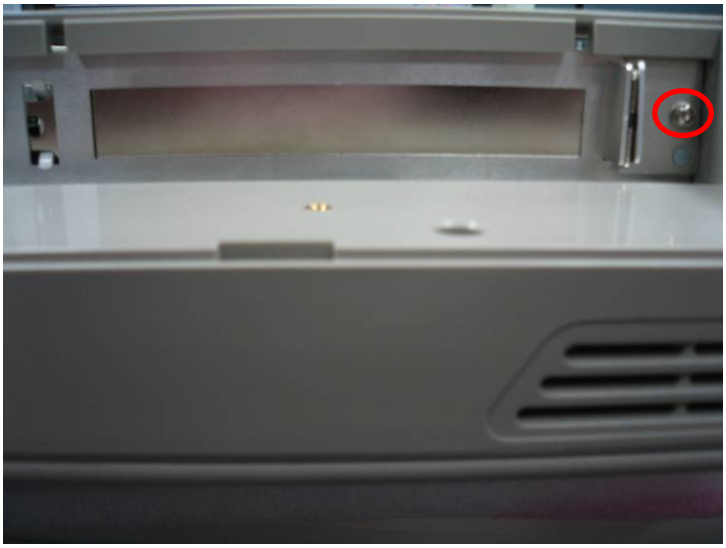


Step 4 Release the screw as marked. And remove plates.

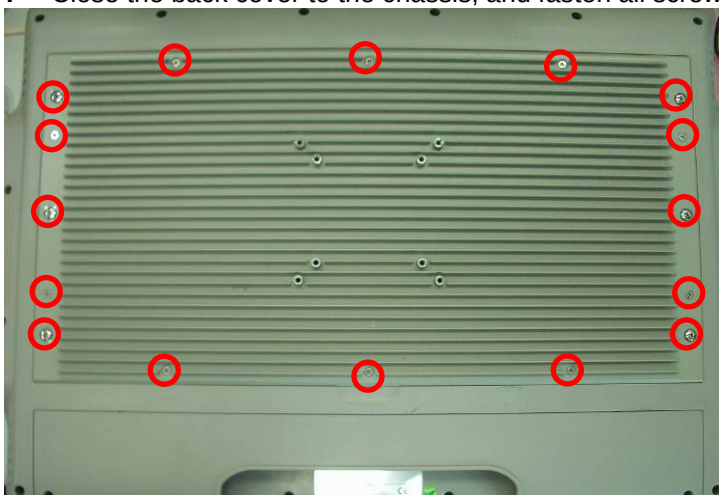
Step 5 Insert the add-on card in the socket firmly until it is completely seated.



Step 6 Fasten the screw as marked



Step 7 Close the back cover to the chassis, and fasten all screws.



2.7 Mount

There are several mounting ways for the **IFO2225-851 Series**, Wall mount, VESA and Desktop mountings as below:

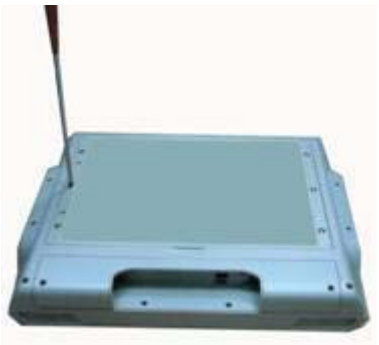
2.6.1 Wall mount

The mounting for IFO2225-851 Series is Wall mount as below:

Step 1 Prepare all parts for installing the wall mount kit.

Step 2 Assemble the wall mount kit by using screws to fix the backplane.

①

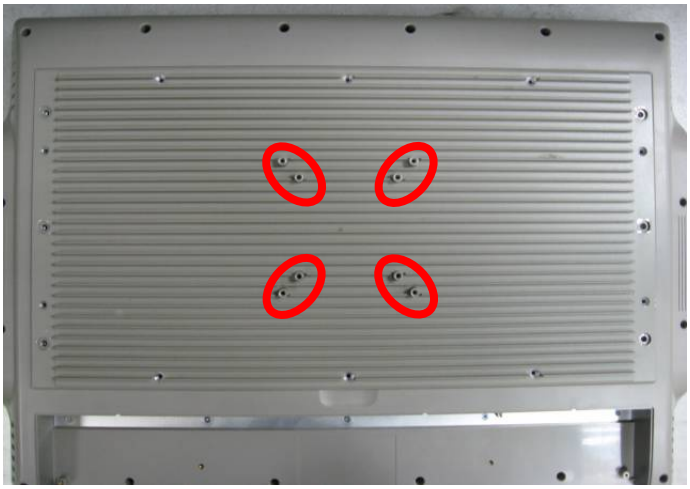


②

2.6.2 VESA Mount

The mounting for IFO2225-851 Series is VESA-Arm as below:

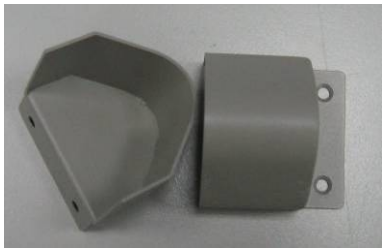
Assemble the VESA-Arm by using screws to fix the backplane.



2.6.3 Desktop Stand (Optional)

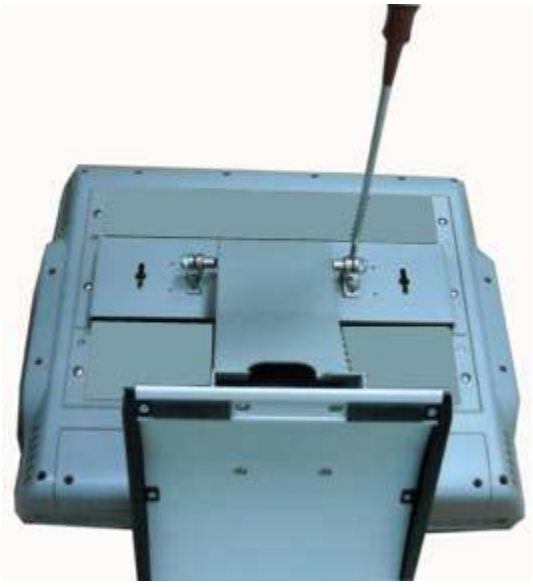
The IFO2225-851 Series provides you with an optional Desktop Stand that you can follow the steps below:

Step 1 Prepare the parts of desktop stand.

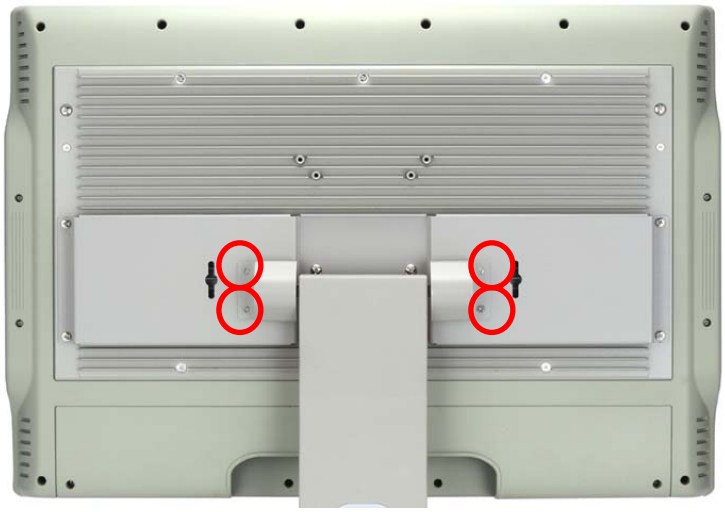
Screw A	Screw B
Screw C	**Hinge Cover**
	

Step 2 Assemble the desktop stand. Fix the screws as marked on the bottom side of chassis. (Use Screw A)

Step 3 Assemble the desktop stand by fixing it onto the system. (Use Screw B).



Step 4 Assembly the hinge cover and fix the screws as marked on the back side of chassis (Use Screw C).



Step 4 Fix the desktop stand finish.

Rear View

Front View

MEMO

CHAPTER 3
BIOS SETUP UTILITY

This chapter provides users with detailed description how to set up basic system configuration through the AMIBIOS8 BIOS setup utility.

3.1 Starting

To enter the setup screens, follow the steps below:

1. Turn on the computer and press the <Del> key immediately.
2. After you press the <Delete> key, the main BIOS setup menu displays. You can access the other setup screens from the main BIOS setup menu, such as the Chipset and Power menus.

3.2 Navigation Keys

The BIOS setup/utility uses a key-based navigation system called hot keys. Most of the BIOS setup utility hot keys can be used at any time during the setup navigation process.
These keys include <F1>, <F10>, <Enter>, <ESC>, <Arrow> keys, and so on.

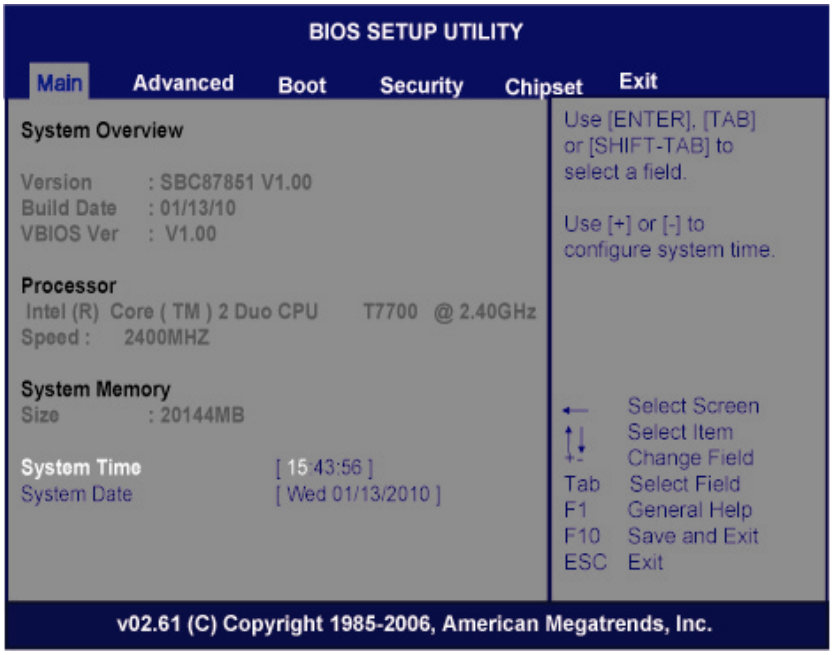
Note *Some of navigation keys differ from one screen to another.*

→← Left/Right	The Left and Right <Arrow> keys allow you to select a setup screen.
↑↓ Up/Down	The Up and Down <Arrow> keys allow you to select a setup screen or sub-screen.
+– Plus/Minus	The Plus and Minus <Arrow> keys allow you to change the field value of a particular setup item.
Tab	The <Tab> key allows you to select setup fields.
F1	The <F1> key allows you to display the General Help screen.

F10	The <F10> key allows you to save any changes you have made and exit Setup. Press the <F10> key to save your changes.
Esc	The <Esc> key allows you to discard any changes you have made and exit the Setup. Press the <Esc> key to exit the setup without saving your changes.
Enter	The <Enter> key allows you to display or change the setup option listed for a particular setup item. The <Enter> key can also allow you to display the setup sub- screens.

3.3 Main Menu

When you first enter the Setup Utility, you will enter the Main setup screen. You can always return to the Main setup screen by selecting the Main tab. There are two Main Setup options. They are described in this section. The Main BIOS Setup screen is shown below.



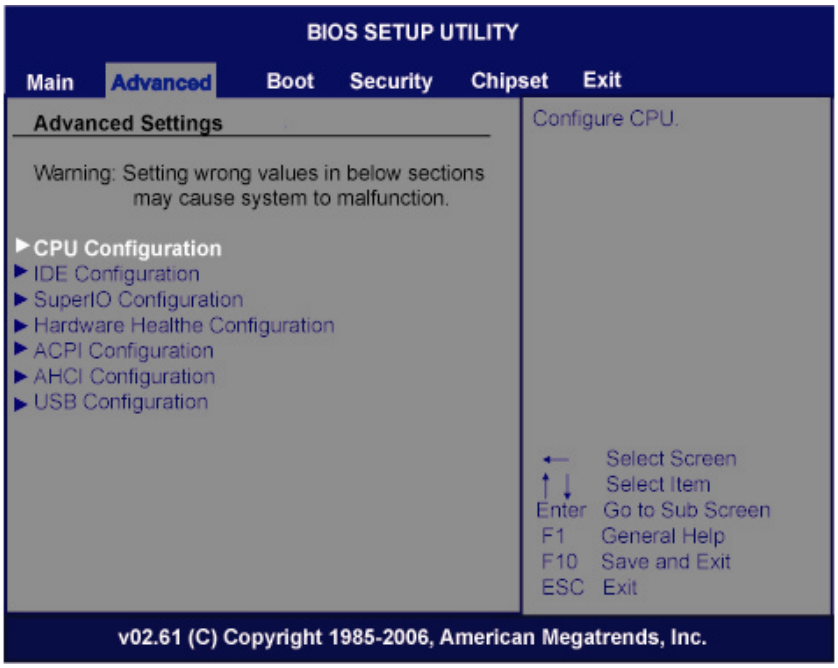
- **System Time/Date**
  Use this option to change the system time and date. Highlight *System Time* or *System Date* using the <Arrow> keys. Enter new values through the keyboard. Press the <Tab> key or the <Arrow> keys to move between fields. The date must be entered in MM/DD/YY format. The time is entered in HH:MM:SS format.

3.4 Advanced Menu

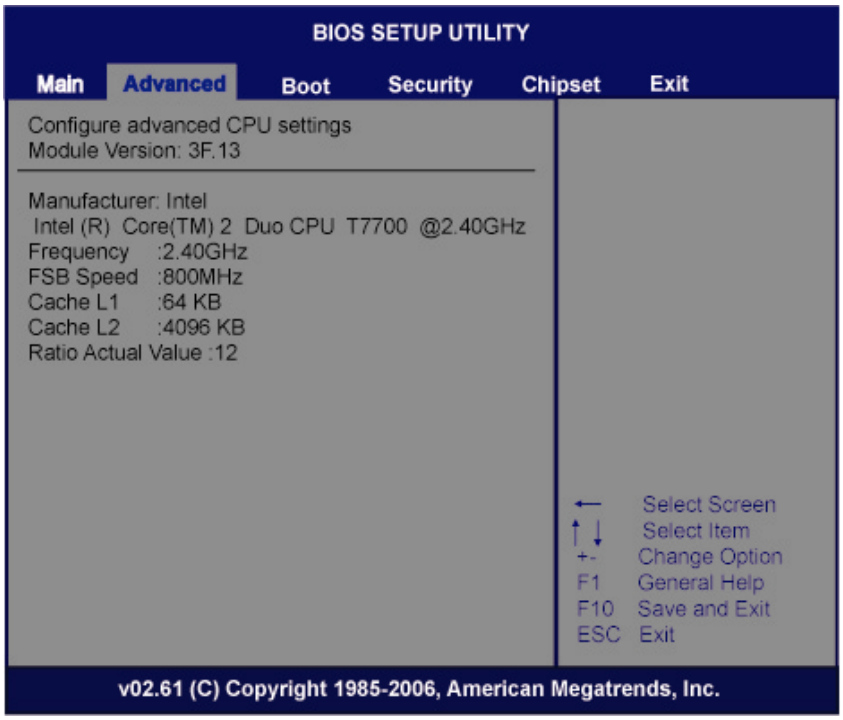
The Advanced menu allows users to set configuration of the CPU and other system devices. You can select any of the items in the left frame of the screen to go to the sub menus:

- CPU Configuration
- IDE Configuration
- Super IO Configuration
- Hardware Health Configuration
- ACPI Configuration
- AHCI Configuration
- USB Configuration

For items marked with "►", please press <Enter> for more options.

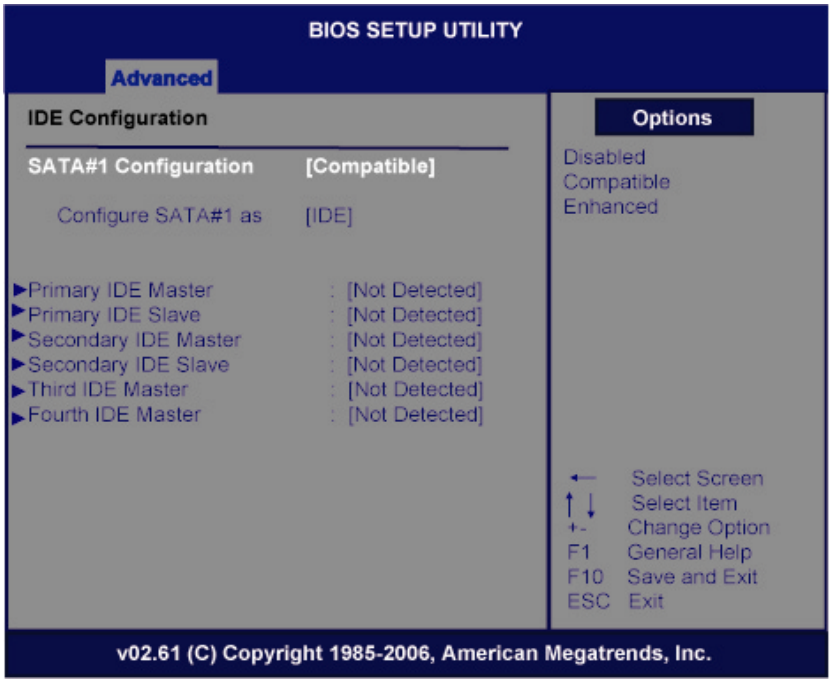


- **CPU Configuration**
  This screen shows the CPU Configuration,



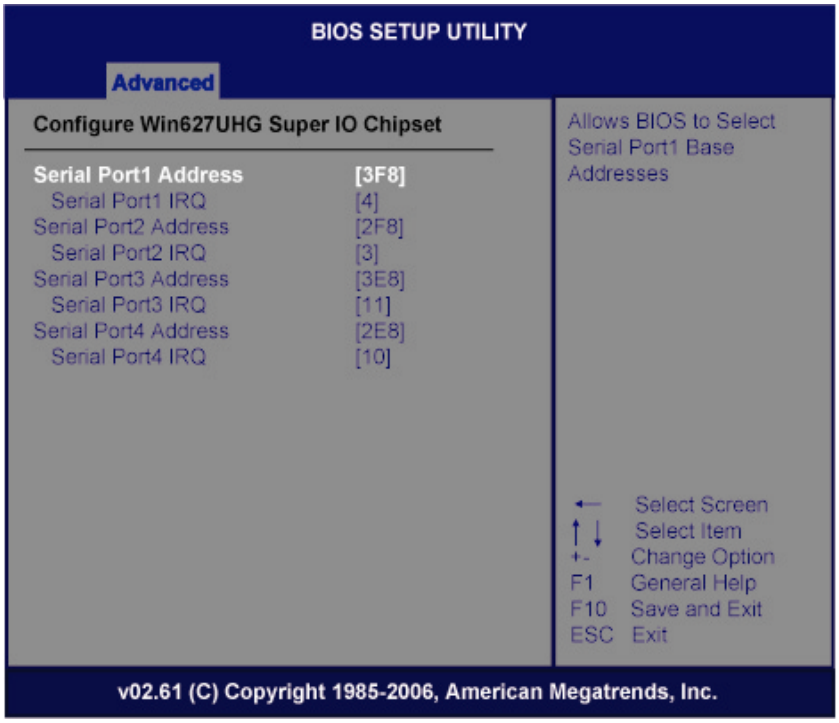
- **IDE Configuration**

  You can use this item to change options for the IDE Configuration,. The available options appear on the right side of the screen. For items marked with "►", please press <Enter> for more options.



  - **SATA#1 Configuration**
    Use this item to control the onboard SATA controller. there are three options for your selection, *Compatible*, *Disabled*, and *Enhanced*.
  - **Configure SATA#1 as**
    Use this item to choose the SATA operation mode. there are two options for your selection, *IDE* and *AHCI*.
  - **Primary/Secondary/Third/Fourth IDE Master/Slave**
    Select one of the hard disk drives to configure IDE devices installed in the system by pressing <Enter> for more options.

- **Super IO Configuration**
  You can use this item to set up the SuperIO configuration.



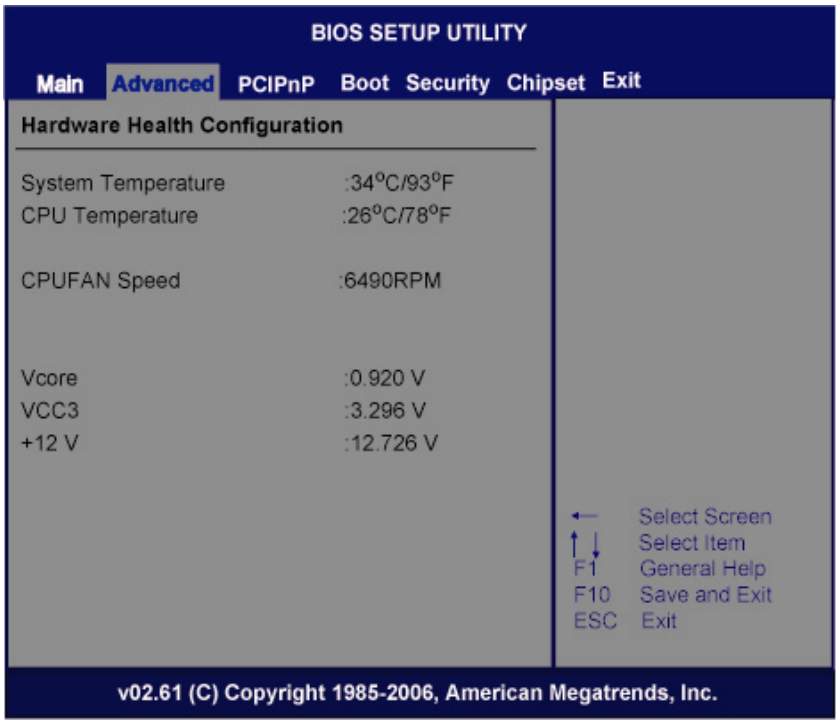
  - **Serial Port1 Address**
    This option specifies the base I/O port address and Interrupt Request address of serial port 1. The Optimal setting is *3F8/IRQ4*. The Fail-Safe default setting is *Disabled*.

- **Serial Port2 Address**
  This option specifies the base I/O port address and Interrupt Request address of serial port 2. The Optimal setting is *2F8/IRQ3*. The Fail-Safe setting is *Disabled*.

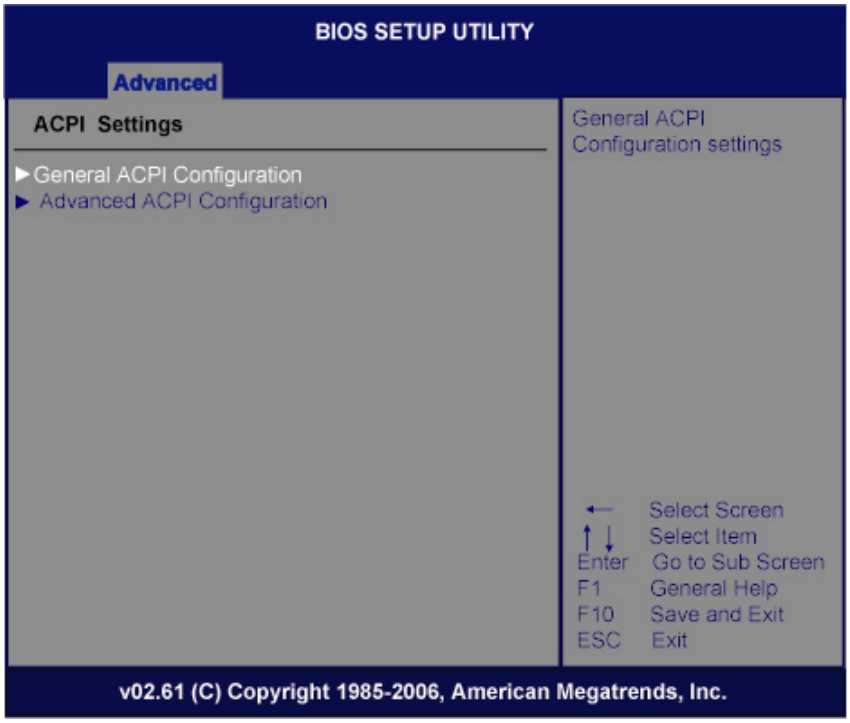
- **Serial Port3 Address**
  This option specifies the base I/O port address and Interrupt Request address of serial port 2. The Optimal setting is *3E8/IRQ11*. The Fail-Safe setting is *Disabled*.

- **Serial Port4 Address**
  T This option specifies the base I/O port address and Interrupt Request address of serial port 2. The Optimal setting is 2*E8/IRQ10*. The Fail-Safe setting is *Disabled*.

- **Hardware Health Configuration**
  This item shows the Hardware Health Configuration.

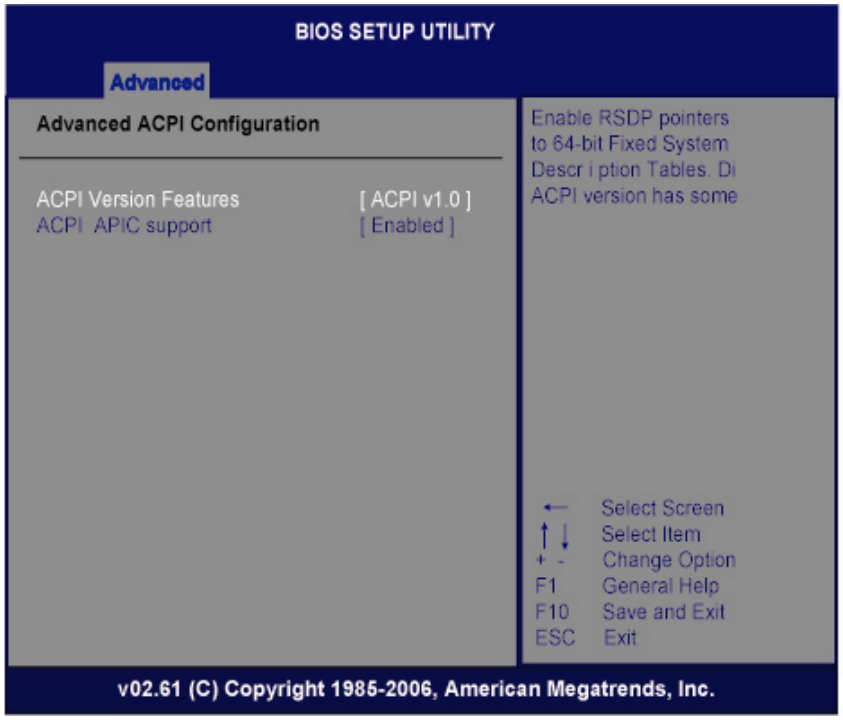


- **ACPI Setting**
  You can use this item to set up ACPI Configuration.



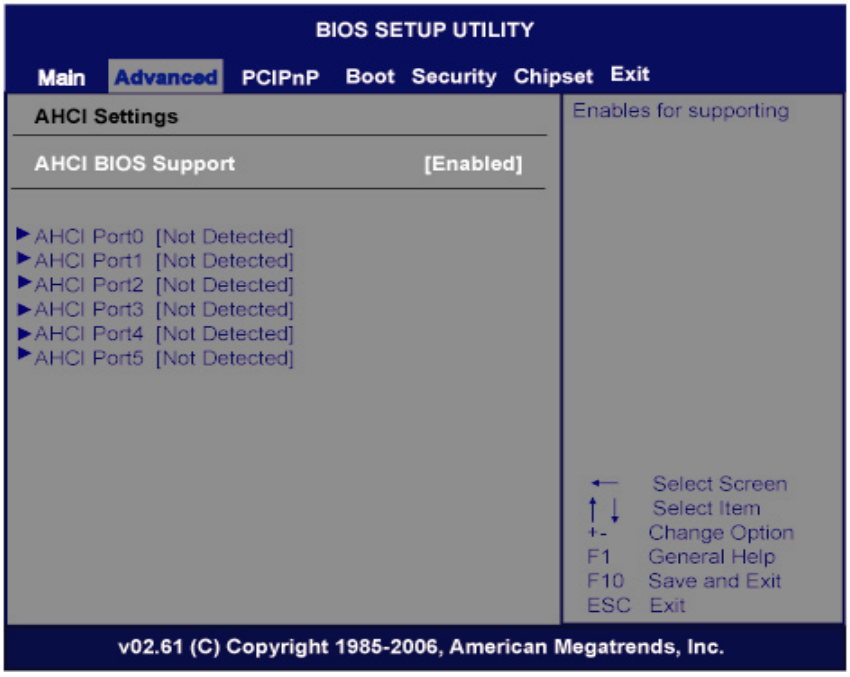
  - **General ACPI Configuration**
    Scroll this item and press <Enter> to view the General ACPI Configuration sub menu, which contains General ACPI (Advanced Configuration and Power Management Interface) options for your configuration.
  - **Advanced ACPI Configuration**
    Scroll this item and press <Enter> to view the Advanced ACPI Configuration sub menu, which contains Advanced ACPI (Advanced Configuration and Power Management Interface) options for your configuration.

- Advanced **ACPI Configuration**
  You can use this item to set up advanced ACPI.


BIOS SETUP UTILITY
Advanced
Advanced ACPI Configuration
ACPI Version Features [ACPI v1.0]
ACPI APIC support [Enabled]
Enable RSDP pointers to 64-bit Fixed System Descr i ption Tables. Di ACPI version has some
Select Screen
Select Item
+ - Change Option
F1 General Help
F10 Save and Exit
ESC Exit
v02.61 (C) Copyright 1985-2006, American Megatrends, Inc.

- **AHCI Configuration**

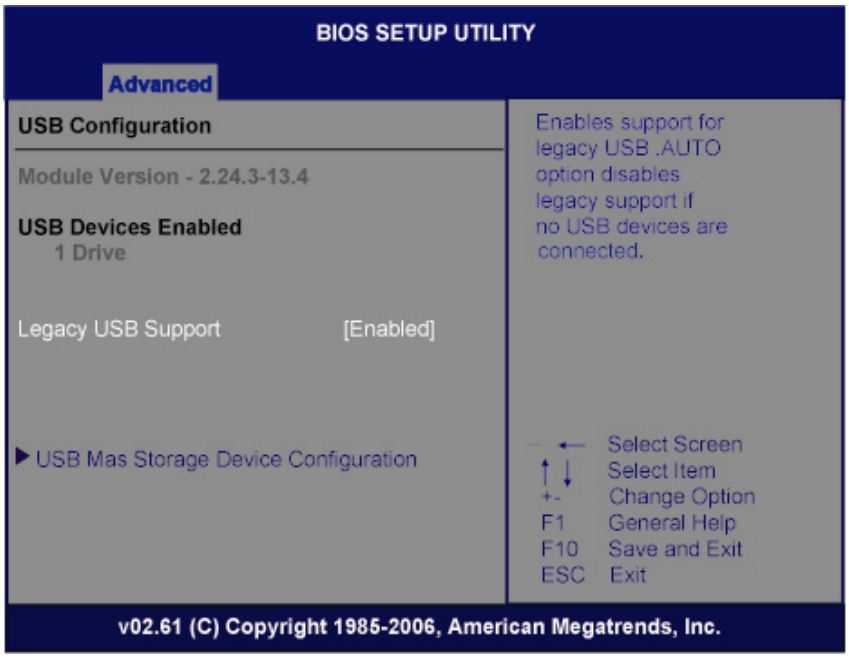
You can use this item to set up AHCI configuration..



  - **AHCI BIOS Support**
    You can enable or disable this item to control the AHCI function of the SATA controller.

- **USB Configuration**

You can use this item to set up the USB Configuration.



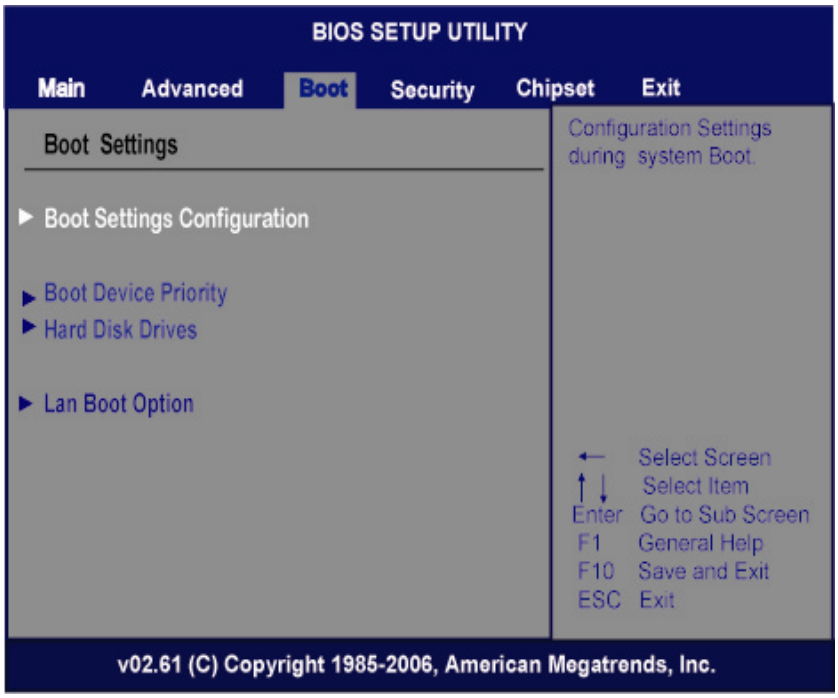
  - **Legacu USB Support**
    Use this item to enable or disable support for USB device on legacy operating system. The default setting is *Enabled*.

3.5 Boot Menu

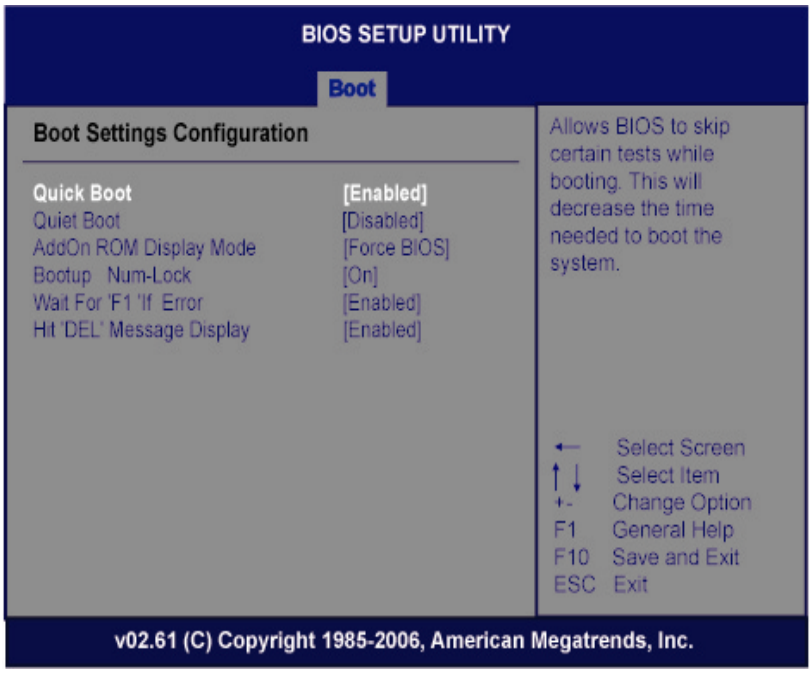
The Boot menu allows users to change boot options of the system. You can select any of the items in the left side of the screen to go to the sub menus:

- **Boot Settings Configuration**

For items marked with "►", please press <Enter> for more options.



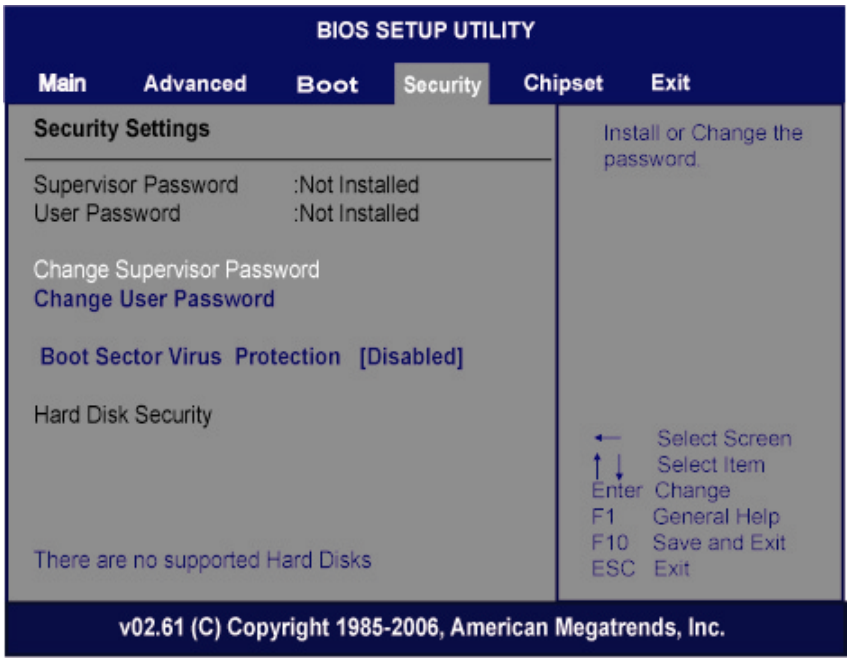
- **Boot Settings Configuration**


BIOS SETUP UTILITY
Boot
Boot Settings Configuration
Quick Boot [Enabled]
Quiet Boot [Disabled]
AddOn ROM Display Mode [Force BIOS]
Bootup Num-Lock [On]
Wait For 'F1 'If Error [Enabled]
Hit 'DEL' Message Display [Enabled]
Allows BIOS to skip certain tests while booting. This will decrease the time needed to boot the system.
Select Screen
Select Item
+- Change Option
F1 General Help
F10 Save and Exit
ESC Exit
v02.61 (C) Copyright 1985-2006, American Megatrends, Inc.

  - **Quick Boot**
    Enabling this item lets the BIOS skip some power on self tests (POST). The default setting is *Enabled*.
  - **AddOn ROM Display Mode**
    This item selects the display mode for option ROM. The default setting is *Force BIOS*.
  - **Boot Num-Lock**
    This item selects the power-on state for the NumLock. The default setting is *On*.
  - **Wait For 'F1' Of Error**
    If this item is enabled, the system waits for the F1 key to be pressed when error occurs. The default setting is *Enabled*.
  - **Hit 'DEL' Message Display**
    If this item is enabled, the system displays the message "Press DEL to run Setup" during POST. The default setting is *Enabled*.

3.6 Security Menu

The Security menu allows users to change the security settings for the system.



- **Supervisor Password**
  This item indicates whether a supervisor password has been set. If the password has been installed, Installed displays. If not, Not Installed displays.
- **User Password**
  This item indicates whether a user password has been set. If the password has been installed, Installed displays. If not, Not Installed displays.
- **Change Supervisor Password**
  Select this option and press <Enter> to access the sub menu. You can use the sub menu to change the supervisor password.

- **Change User Password**
  Select this option and press <Enter> to access the sub menu. You can use the sub menu to change the user password.

- **Boot Sector Virus Protection**
  This option is near the bottom of the Security Setup screen. The default setting is *Disabled*

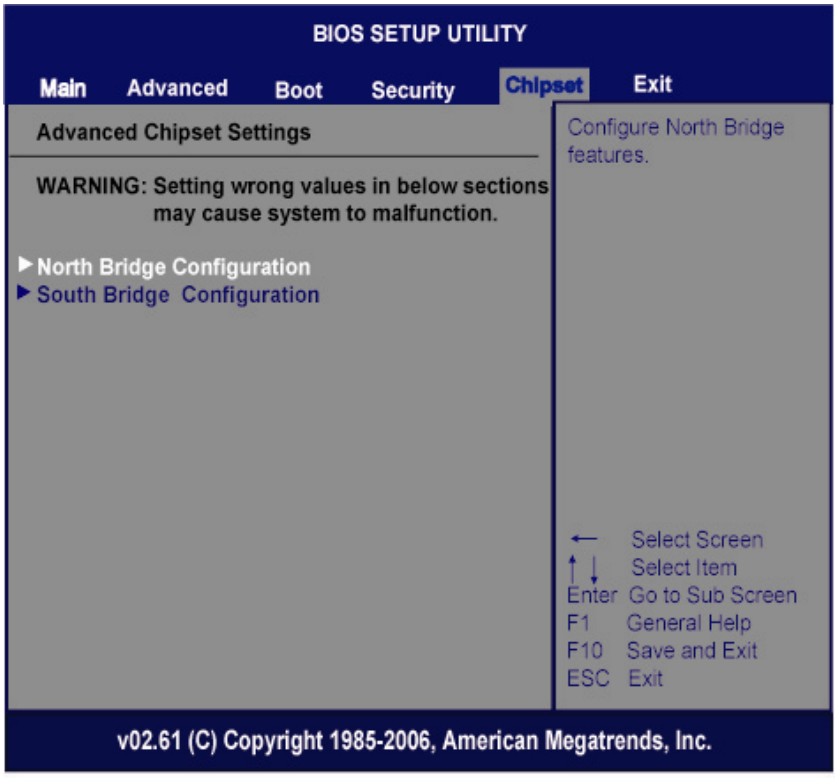
Disabled	Set this value to prevent the Boot Sector Virus Protection. This is the default setting.
Enabled	Select Enabled to enable boot sector protection. It displays a warning when any program (or virus) issues a Disk Format command or attempts to write to the boot sector of the hard disk drive. If enabled, the following appears when a write is attempted to the boot sector. You may have to type N several times to prevent the boot sector write. Boot Sector Write! Possible VIRUS: Continue (Y/N)? _ The following appears after any attempt to format any cylinder, head, or sector of any hard disk drive via the BIOS INT 13 Hard disk drive Service: Format!!! Possible VIRUS: Continue (Y/N)?

3.7 Chipset Menu

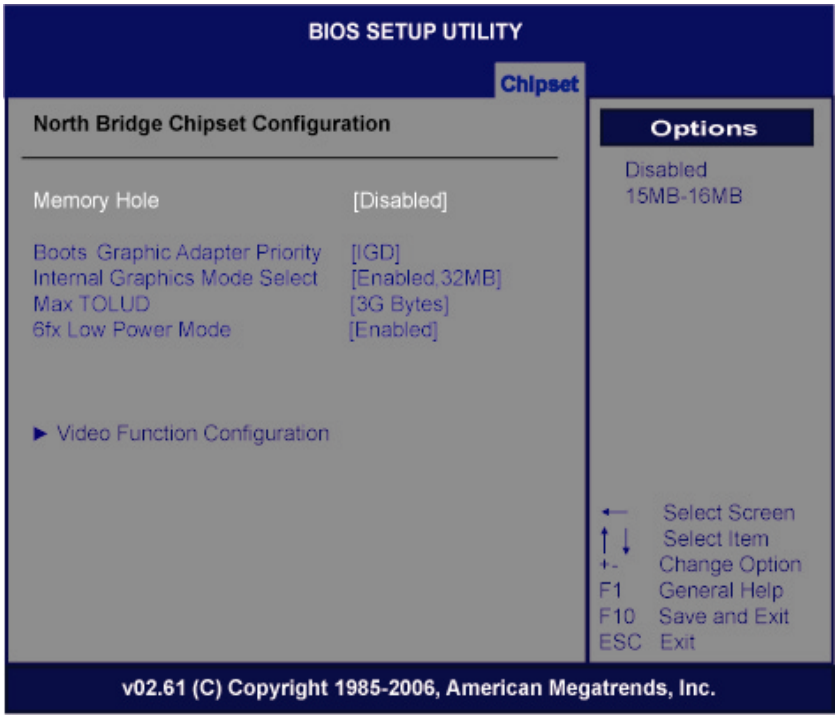
The Chipset menu allows users to change the advanced chipset settings. You can select any of the items in the left side of the screen to go to the sub menus:

- North Bridge Configuration
- South Bridge Configuration

For items marked with "►", please press <Enter> for more options.



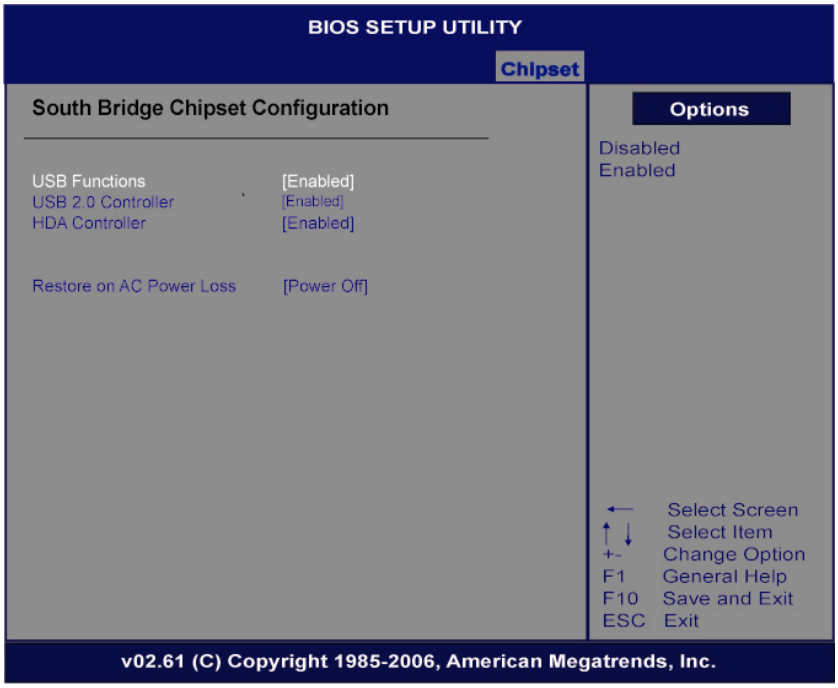
- **North Bridge Configuration**



  - **Memory Hole**
    You can reserve this area of system memory for ISA adapter ROM. When this area is reserved it cannot be cached. Check the user information of peripherals that need to use this area o f system memory for the memory requirements. There are two options, *Disabled* and *15M-16M*.
  - **Boot Graphic Adapter Priority**
    This item allows you to select the graphics controller as the primary boot device.
  - **Internal Graphics Mode Select**
    This item allows you to select the amout of system memory used by the internal graphics device.
  - **Video Function Configuration**

You can press <Enter> for the sub-menu to set up video function.

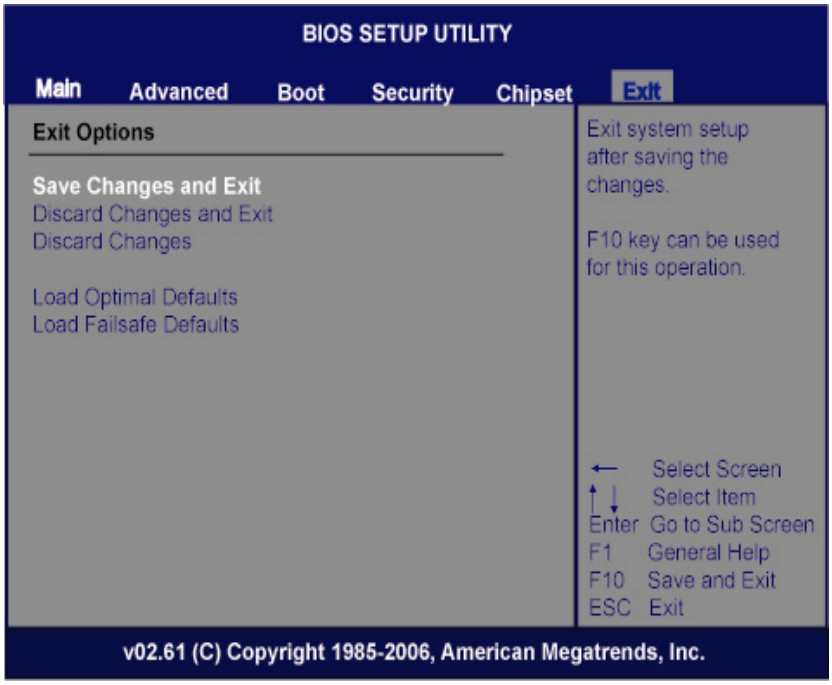
- **South Bridge Configuration**



- **USB Controller**
  This item allows you to enable or disable USB function/controller.
- **Restore on AC Power Loss**
  This item controls how the PC will behave once power is restored following a power outage, or other unexpected shutdown.

3.8 Exit Menu

The Exit menu allows users to load your system configuration with optimal or failsafe default values.



- **Save Changes and Exit**
  When you have completed the system configuration changes, select this option to leave Setup and reboot the computer so the new system configuration parameters can take effect. Select *Save Changes and Exit* from the Exit menu and press <Enter>. Select Ok to save changes and exit.

- **Discard Changes and Exit**
  Select this option to quit Setup without making any permanent changes to the system configuration. Select *Discard Changes and Exit* from the Exit menu and press <Enter>. Select Ok to discard changes and exit.

- **Discard Changes**
  Use this item to abandon all changes.

- **Load Optimal Defaults**
  It automatically sets all Setup options to a complete set of default settings when you select this option. The Optimal settings are designed for maximum system performance, but may not work best for all computer applications. In particular, do not use the Optimal Setup options if your computer is experiencing system configuration problems. Select Load Optimal Defaults from the Exit menu and press <Enter>.

- **Load Fail-Safe Defaults**
  It automatically sets all Setup options to a complete set of default settings when you select this option. The Fail-Safe settings are designed for maximum system stability, but not maximum performance. Select the Fail-Safe Setup options if your computer is experiencing system configuration problems. Select Load Fail-Safe Defaults from the Exit menu and press <Enter>. Select Ok to load Fail-Safe defaults.

CHAPTER 4
DRIVER INSTALLATION

4.1 System

IFO2225-851 supports Windows XP/ Windows Vista to facilitate the installation of system driver, please carefully read the instructions in this chapter before start installing.

1. Insert Driver CD in the disk, and select the \IFO2225-851\Driver\..

2. Please follow folder Step 1 to Step 7 for IFO2225-851 driver installation.

4.2 Touch Screen

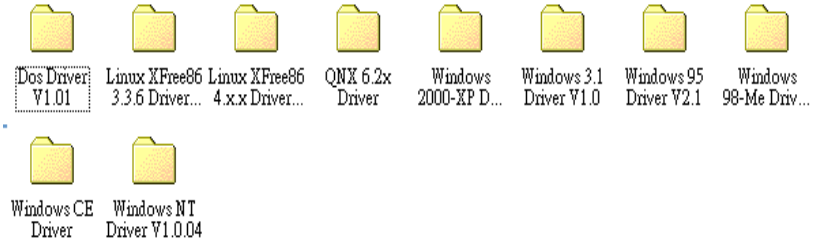
4.2.1 Specification

Touch Screen	For 5-wire analog resistive type
Touch Screen Controller	PenMount 6000 microcontroller
Communications	USB
Resolution	1024 x 1024
Power Input	5V
Power Consumption	Standby Mode : 13.4mA; Active Mode: 24.6mA (VCC=5V, Top sheet Panel Resistance: 274 ohm, Bottom sheet Panel Resistance: 770 ohm)

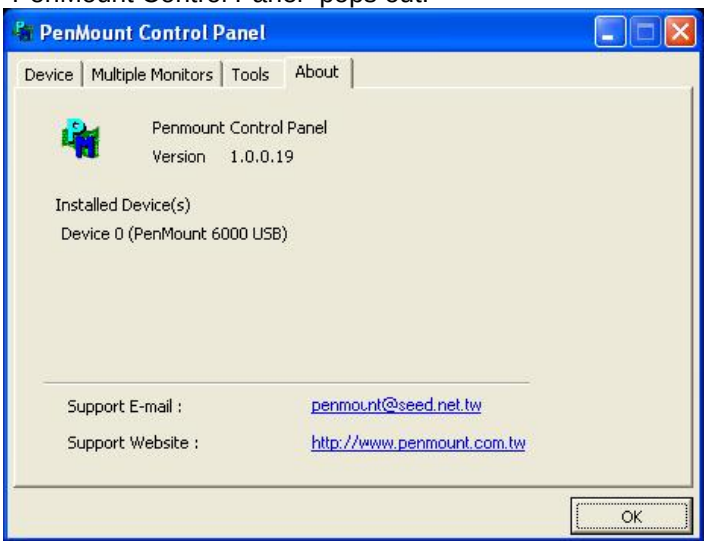
4.2.2 Driver Installation

The **IFO2225-851 Series** provides a driver of the touch screen that users can install it under operating system Windows XP/ Windows Vista. To facilitate this touch screen driver installation, users should read the instructions in this chapter carefully before start the installation.

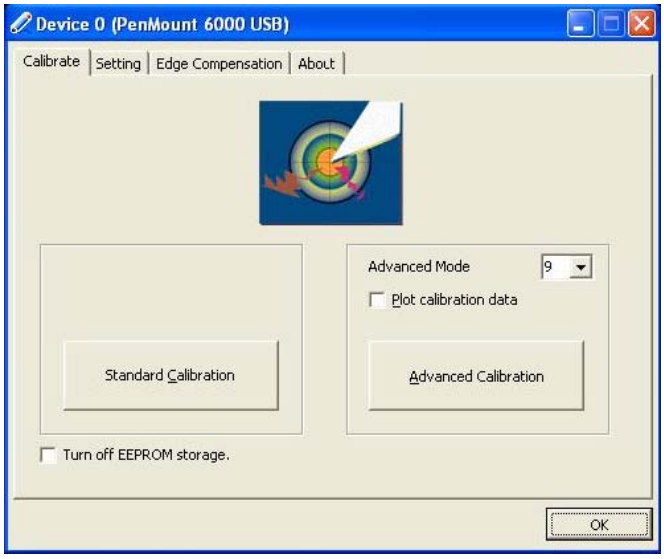
1. Insert Driver CD and select the D:\IFO2225-851\Driver\Step6 - Touch\Driver\Win2000-XP\setup.exe



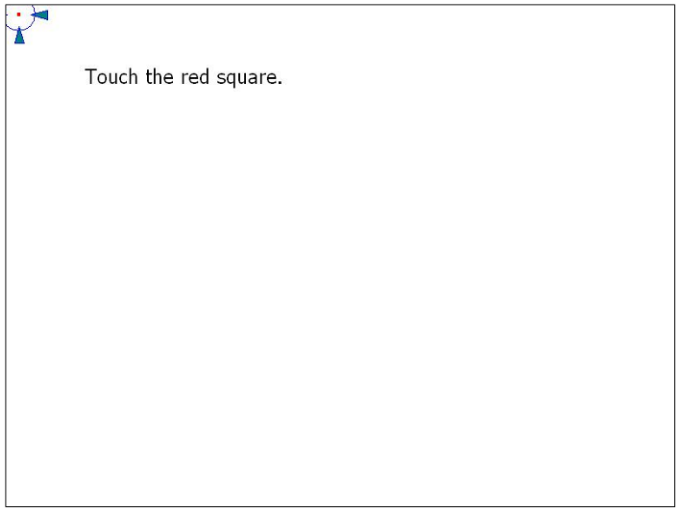
2. Follow the installing procedure and press OK.
3. Click Start menu and select "PenMount Utilities", and then a "PenMount Control Panel" pops out.



4. Click the "Standard Calibration" button.



5. Calibration:
   To adjust the display with touch panel, click "Calibration" and follow the calibrate point to do calibration; there are five points on screen for calibration.



6. Press OK.